

EXHIBIT 3

Page 1

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - MIDDLESEX COUNTY
DOCKET NO. MID-L-003809-18AS

KAYME A. CLARK and)
DUSTIN W. CLARK,) 104 HEARING
)
Plaintiffs,) TRANSCRIPT OF
) PROCEEDINGS
v.)
) (VOLUME I)
)
JOHNSON & JOHNSON, et al.,)
et al.,)
)
Defendants.)

Place: Middlesex County Courthouse
56 Paterson Street
New Brunswick, New Jersey 08903

Date: May 29, 2024
9:02 a.m.

B E F O R E:

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<p style="text-align: right;">Page 34</p> <p>1 A. For the three reports that we have, 2 that's correct. 3 Q. Okay. And so I want to talk about 4 this idea of concentration for a second because 5 you've raised that a number of times in terms of 6 sample prep. 7 And as we said, one of the 8 explanations for your saying that you didn't see 9 amphibole by TEM back in that day was that you 10 weren't using concentration, right? 11 A. We didn't have -- that's right, we 12 didn't have the detection limit, except for those 13 two which had so much tremolite in them that you 14 wouldn't need the concentration method. 15 Q. So, slide 9, I want to talk a little 16 bit about the concentration method as it relates to 17 chrysotile. Okay? 18 A. Yes, sir. 19 Q. And so, it's a different 20 concentration technique than you -- in some respects 21 than you use for amphibole, right? 22 A. Not really different. It's the same 23 methodology that's been used for hundreds of years. 24 Q. Okay. 25 A. It just changes like what you do with</p>	<p style="text-align: right;">Page 36</p> <p>1 Q. Okay. 2 A. Maybe I misunderstood what you were 3 asking. 4 Q. I just want to know what the variable 5 is that changed, okay, that changed so that now 6 you're identifying it. So, I'm exploring whether or 7 not that is the use of concentration. So, that's 8 what we're going to talk about now and, trust me, 9 we'll be talking about Calidria. Okay? 10 A. The variable that changed is that we 11 got our hands on the Calidria SG-210. That helped 12 the analyst understand what they were looking for 13 since the SG-210 has all the same characteristics of 14 what we're finding in the chrysotile. That's what 15 changed. 16 Q. Okay. Trust me, we're going to talk 17 about that. 18 When was the first time your lab ever 19 examined Calidria chrysotile? 20 A. The first time? 21 Q. Yep. 22 A. I think the first time is when we 23 looked at some Visbestos some years ago under court 24 order, and this was like in 2015 or '14, and we did 25 PLM analysis there. And if you go to your Exhibit</p>
<p style="text-align: right;">Page 35</p> <p>1 heavy liquid density is you change the density of 2 the liquid you're using to correspond to what you 3 needed to either make the asbestos float or sink. 4 Q. Well, one of the things that we know 5 because if you were to say, and I think you've 6 implied this a few times, well, in the past I wasn't 7 finding chrysotile by PLM because I wasn't using a 8 concentration method, one of the things that we know 9 is that you currently claim to be able to find 10 chrysotile in these products both with and without 11 concentration, right? 12 A. Yes, sir. But to be fair it was only 13 after we got the Union Carbide, what I call 14 standards, so that the individuals knew what they 15 were looking for because they're so small, so, there 16 was a learning curve here. We're scientists. We 17 try to come up with better ways to analyze things. 18 Q. And so you're mixing topics because 19 you're now talking about whether -- what types of 20 chrysotile you should be comparing to. I'm focusing 21 on the concentration method. Okay? Okay? Can we 22 talk about that? 23 A. I apologize. I thought I was 24 answering your question on why our analysts were now 25 finding it with and without concentration method.</p>	<p style="text-align: right;">Page 37</p> <p>1 25, you can see the PLM analysis and the size 2 ranges, the length and the width, back in 2017 or 3 '15, are identical to what we're seeing with the 4 SG-210 today and it's identical to what the size of 5 the chrysotile is that we're seeing in cosmetic 6 talc. 7 Q. And, again, we're going to talk about 8 that and I want to focus on concentration right now. 9 And so, even, for example, in 2021 10 you were already using a heavy density liquid 11 separation method for chrysotile, right? 12 A. Yes, sir. 13 Q. And you were asked and you agreed 14 that the use of that concentration method really 15 wasn't improving your ability to detect chrysotile 16 under PLM in comparison to just doing it the 17 standard way, right? 18 A. That's what we found then, yes. 19 Q. And if we look at charts of your 20 results, for example, I think this is slide 10, this 21 is just an example of some of your results, we'll 22 see that both with and without concentration you're 23 routinely reporting chrysotile in the samples for 24 Johnson & Johnson, right? 25 A. Correct.</p>

<p style="text-align: right;">Page 38</p> <p>1 Q. And when we talk about concentration, 2 if we go back to slide 5 for a second, concentration 3 is a sample method, it's not a microscope, right; 4 sample preparation method, apologies? 5 A. Yes. It's a sample preparation 6 method for either TEM, PLM, SEM, whatever you'd like 7 to use. 8 Q. Right. So, you can take the results 9 of what you get from the concentration and you can 10 use it with a variety of different microscopes, 11 right? 12 A. Correct. 13 Q. And so, the concentration method, 14 when you developed the concentration method for 15 amphiboles or when you had it adequately tested in 16 your lab, you chose to take what you got from that 17 concentration sample prep and look at it with TEM, 18 right? 19 A. And PLM, both. 20 Q. Eventually PLM, first TEM, right? 21 A. First TEM, then PLM for the MDL 22 samples also. We were comparing. 23 Q. But when you got your chrysotile 24 concentration method worked out in this red period, 25 you did not take that and look at it under TEM for</p>	<p style="text-align: right;">Page 40</p> <p>1 THE COURT: If the witness is saying 2 that it's misleading -- 3 MR. DUBIN: Okay. Go ahead. 4 THE COURT: -- then I'm going to let 5 him explain. 6 BY MR. DUBIN: 7 Q. You can explain how it's misleading. 8 A. Well, you have to understand -- 9 THE COURT: I'm sorry. 10 MR. DUBIN: I apologize. 11 A. -- what was in the literature, say, 12 Blount, amphiboles; what was, you know, New York, 13 heavy liquid density, amphiboles. It was all worked 14 out. 15 When we hit the chrysotile, looked at 16 the chrysotile, the overwhelming feeling was can't 17 do it. Even in the ISO 22262-1, it said it's 18 theoretically possible but not practical. So, there 19 was a lot of research work that had to be done and 20 we wouldn't even have tried if we didn't come across 21 Johnson & Johnson's heavy liquid density from the 22 Colorado School of Mines. That took a lot of 23 tweaking, so to speak. So, the amphiboles was 24 there. You had the Blount method already published, 25 et cetera, so it's either use, you know, 2.81 that</p>
<p style="text-align: right;">Page 39</p> <p>1 Johnson & Johnson, right? 2 A. Again, I apologize. It's a little 3 misleading. You've got it going all the way to 4 2023. We have just come up, working in concert with 5 another laboratory, with the heavy liquid density, 6 the amount of spin time, what we've been waiting 7 for, to do this. 8 Secondly, there is no requirement 9 anywhere that once it's positive by PLM, that you 10 have to do TEM to verify it. Not EPA, not OSHA, not 11 NIOSH, nobody, and even FDA has come out and said if 12 it's positive by PLM, you can stop. 13 Q. Okay. We're going to talk about all 14 that but I asked you a fairly simple question, 15 right? 16 When you -- before when you were 17 looking for amphiboles, you took the concentration 18 and then you looked it under TEM for Johnson & 19 Johnson, you took the concentration, you only looked 20 at it by PLM, right to today? 21 A. It's misleading how you're saying 22 that. 23 MR. DUBIN: I'm sorry, Your Honor. 24 Can I please have the witness directed to answer my 25 question.</p>	<p style="text-align: right;">Page 41</p> <p>1 Blount says, or the 2.65 that the ISO 22262-2 said, 2 one. With chrysotile there was no such protocol, 3 except for Colorado School of Mines couple-page 4 protocol. 5 Q. Okay. Very simple question: When 6 you had PLM, you got the concentration you looked 7 under TEM -- sorry. 8 When you were looking for amphiboles 9 you had concentration, you looked at it under TEM. 10 When you're switching to chrysotile, now you are 11 taking the concentration and only looking at it 12 under PLM for J&J, is that true or false? I mean -- 13 A. It's both yes and no. 14 Q. So, you do look -- so, you do, did 15 use TEM for Johnson & Johnson? 16 A. No. I think I already stated that we 17 have not done Johnson & Johnson. What we have done 18 so far is Avon products. And one of them happened 19 to be sourced from Vermont. 20 Q. And so let's then talk a little bit 21 about the impact of the choice to use PLM verse TEM. 22 Okay? And I want to talk a little bit about those 23 different methods. So, if we can go to slide 11. 24 So talk a little bit about mineral 25 identification. We're going to get into PLM a lot,</p>

<p style="text-align: right;">Page 42</p> <p>1 but let's first do TEM because it's fairly quick. 2 So if we then go to slide 12, these 3 are -- the things below are not chrysotile, they're 4 amphibole. But within of the things that TEM can do 5 is if you find a particle and you want to know is it 6 talc, is it chrysotile, it can provide you detailed 7 information on chemistry and on crystal structure to 8 identify the proper mineral, correct? 9 A. Correct. 10 Q. Okay. In fact, you have said if you 11 use a TEM, if you choose to use a TEM, it is fairly 12 simple to tell whether or not you are, in fact, 13 looking at chrysotile as opposed to talc, right? 14 A. Correct. 15 Q. Okay. And now let's talk about PLM 16 and the additional dimension that adds and how it 17 can then be manipulated as we'll eventually say by 18 an analyst. 19 Before I get there, though, I want to 20 just talk a little bit about your PLM 21 qualifications. Okay? And so, slide 13. 22 Fair to say that as of 2019, which is 23 right before you started to issue reports claiming 24 to find chrysotile in Johnson & Johnson, you said 25 that you personally do not do PLM analysis?</p>	<p style="text-align: right;">Page 44</p> <p>1 analyze those samples but it would take me all day 2 so I don't do it. 3 Q. Okay. We'll talk more about that a 4 little bit later but... 5 And if we look at the reports in 6 which MAS has claimed to find chrysotile in 7 Johnson & Johnson, you can see the names of the 8 people who actually did the analysis, right? 9 A. Correct. 10 Q. And you are never listed as the 11 analyst? 12 A. Well, the only people that is listed 13 as the analyst is the person that goes from start to 14 finish. When I sit down or there's a structure that 15 there's some debate on it and I sit down and look at 16 it and go through it, I don't put my name down for 17 one structure. That's not fair. 18 Q. Okay. But, again, the analyst would 19 typically be somebody like a Paul Hess, right? 20 A. Correct. 21 Q. Okay. But you, I think you just said 22 you feel comfortable answering questions today about 23 PLM dispersion analysis and how it's done at MAS, 24 right? 25 A. Yes, sir.</p>
<p style="text-align: right;">Page 43</p> <p>1 A. That's correct. 2 Q. And, in fact, you said that as of 3 2019 you had never analyzed a sample of talc for the 4 presence of asbestos from start to finish using PLM, 5 correct? 6 A. Correct. 7 Q. And at least as of 2023, when we last 8 asked you, you said you had never taken any classes 9 in the type of PLM analysis we're going to be 10 talking about which is referred to as PLM dispersion 11 staining, not a single class, right? 12 A. No, sir. 13 Q. So, it's correct you didn't take a 14 class, right? 15 A. Never taken a class in PLM analysis 16 to understand how to identify asbestos in 17 asbestos-added products. 18 Q. You are a self-taught PLM 19 analysis -- analyst, right? 20 A. Yes, sir. I don't want to sound, you 21 know, braggadocios, but I have a Ph.D. in material 22 science and engineering where you know everything 23 about every type of microscope, et cetera, and 24 typically Ph.D. levels don't take basic PLM classes. 25 I know the science really well on PLM. I could</p>	<p style="text-align: right;">Page 45</p> <p>1 Q. Great. 2 So, let's just start talking about 3 the differences. We've already said it's a fairly 4 simple matter to identify chrysotile with TEM. I 5 want to talk a little bit about how to identify 6 minerals using PLM dispersion staining. First, 7 we're just going to walk through a bit of the 8 process before eventually we're going to start 9 looking at your images in light of what we have 10 discussed. Okay? 11 And so, if we just remind ourselves 12 first, slide 1 'cause we're going to be talking 13 about one of these topics and I think you agreed 14 with it. 3, PLM analysis starts with the analyst 15 picking the right color and I think you agreed with 16 that, right? 17 A. I agree. 18 Q. So, I want to start to explain how 19 this works, anybody who's sort of following along 20 from the gallery don't worry, we're going to be 21 going back in each concept multiple times. All 22 right. And we can start out a little bit looking at 23 slide 15 as an example. And I think we were going 24 to introduce as, I guess it's Defense 2, just a copy 25 of the ISO standards that will be D-2, from which</p>

<p style="text-align: right;">Page 46</p> <p>1 some of this will be drawn. Thank you.</p> <p>2 MR. DUBIN: Would Your Honor -- do</p> <p>3 you want a copy?</p> <p>4 THE COURT: No, I don't need one, but</p> <p>5 thank you.</p> <p>6 MR. DUBIN: No problem.</p> <p>7 THE COURT: Is D-2 a combination of</p> <p>8 standards or one standard?</p> <p>9 MR. DUBIN: It should be one</p> <p>10 standard, Your Honor.</p> <p>11 BY MR. DUBIN:</p> <p>12 Q. So, we're going to be talking a good</p> <p>13 bit about what colors you should see under a</p> <p>14 microscope for chrysotile, what colors you're</p> <p>15 calling things. I don't want to get there yet. I</p> <p>16 just want to talk about the process. Okay?</p> <p>17 And so, what we're looking at here is</p> <p>18 an image in parallel, and we'll talk about why</p> <p>19 that's significant, of ISO reference chrysotile in</p> <p>20 1.550 oil, right?</p> <p>21 A. The 1866b NIST standard from Black</p> <p>22 Lake, Canada, Johns-Manville's source, yes.</p> <p>23 Q. And so, again, just to talk about the</p> <p>24 process, and we'll talk more about this later, when</p> <p>25 you do this type of analysis, you have to select a</p>	<p style="text-align: right;">Page 48</p> <p>1 Q. Okay. But if we go to the next</p> <p>2 step, just so you understand the process, slide</p> <p>3 17 -- sorry, actually, it's slide 16 first.</p> <p>4 So what the analyst will do is they</p> <p>5 will observe the particle under the microscope in</p> <p>6 the refractive index oil and they will determine</p> <p>7 what color they say they are seeing, right?</p> <p>8 A. Correct.</p> <p>9 Q. And then the next step on a very</p> <p>10 basic level, if we go to slide 17, is that that</p> <p>11 particular color will be associated with a</p> <p>12 wavelength of light, right?</p> <p>13 A. Yes.</p> <p>14 Q. And so, here if we take that sort of</p> <p>15 magenta-y color, that would be approximately 540</p> <p>16 nanometers if you're converting it into a wavelength</p> <p>17 of light, right?</p> <p>18 A. Yeah, 540, 530, right around there.</p> <p>19 Q. Okay. And we can show which it is</p> <p>20 but the next thing you do, the next step, if we go</p> <p>21 to slide 18, is that you take that wavelength of</p> <p>22 light and considering what oil you're using and</p> <p>23 temperature and things like that, you can then</p> <p>24 convert it into what's known as a refractive index</p> <p>25 number or RI number, right?</p>
<p style="text-align: right;">Page 47</p> <p>1 refractive index oil, right?</p> <p>2 A. Yes.</p> <p>3 Q. And the colors of particles can be</p> <p>4 slightly different depending on which refractive</p> <p>5 index oil you use, right?</p> <p>6 A. That is correct.</p> <p>7 Q. So, we're going to be talking a lot</p> <p>8 about two different periods of your work but right</p> <p>9 now the refractive index oil that we're going to be</p> <p>10 focusing on is 1.550 and that's the oil that's used</p> <p>11 for this reference image, right?</p> <p>12 A. Yes.</p> <p>13 Q. Okay. And so, if we look at the</p> <p>14 steps that happen, let's assume I'm an analyst and</p> <p>15 I'm looking down the microscope and I see this</p> <p>16 structure, let me first ask you: What would you</p> <p>17 say, and we'll explain what this means, what the</p> <p>18 refractive index of this particle is based on</p> <p>19 looking at it?</p> <p>20 A. I would say the majority of what</p> <p>21 we're looking at is in the 1.556 1.557 range and</p> <p>22 people always call it magenta.</p> <p>23 Q. Okay.</p> <p>24 A. For a big bundle of chrysotile like</p> <p>25 this, that's not surprising.</p>	<p style="text-align: right;">Page 49</p> <p>1 A. Yes.</p> <p>2 Q. Okay. And we're going to be working</p> <p>3 with those numbers a good bit today. And there is</p> <p>4 an image here of an individual, Dr. Su, and there</p> <p>5 are tables and methods that are used to perform this</p> <p>6 type of analysis that were developed by him, right?</p> <p>7 A. This analysis?</p> <p>8 Q. Yes, this kind of PLM dispersion</p> <p>9 staining analysis.</p> <p>10 A. No. I would give the credit to</p> <p>11 Dr. Walter McCrone back in the early '70s.</p> <p>12 Q. You use the Su tables as part of your</p> <p>13 analysis?</p> <p>14 A. Yes. He gives them out when he</p> <p>15 audits your lab. So, we have them there. The</p> <p>16 analyst, especially Mr. Hess who's been doing this</p> <p>17 for, I don't know, 40 years, but we always use them</p> <p>18 because it's handy.</p> <p>19 Q. Do you recognize Dr. Su in this</p> <p>20 courtroom?</p> <p>21 A. I'm trying to remember the last time</p> <p>22 he came and audited our laboratory.</p> <p>23 Q. I mean right there.</p> <p>24 A. Right where?</p> <p>25 Q. Right there. Can you please stand</p>

<p style="text-align: right;">Page 86</p> <p>1 Q. Well, you and Dr. Su were at a 2 conference and you didn't go and talk to him, right? 3 A. I never saw Dr. Su. I never knew he 4 was there. So, yeah, if I saw Dr. Su, I would have 5 asked him about it. 6 Q. And one of the things that you have 7 criticized in Dr. Su's report is the idea that he 8 manipulated your images or Photoshopped your images 9 is one of the things you've said, right? 10 A. Yes, sir. 11 Q. And so, I want to look at those 12 images and what he did and what his point was and 13 then we'll talk about how it applies to your work. 14 But first I just want to understand on a very basic 15 level how illumination can impact color which then 16 goes into your analysis by which you call the stuff 17 you're finding chrysotile. 18 And so, let's just start first with 19 slide 37 and I made these. I can't see how they 20 look. So, I just took, I went and found some 21 flowers on Amazon, if anybody likes them, you 22 can -- I think it's 14.99 for Forget-Me-Nots, and 23 blew up a little bit of the image of some of the 24 flowers that are on the Amazon site. 25 And then if we go to slide 38, I just</p>	<p style="text-align: right;">Page 88</p> <p>1 in the United States never looking at the operative 2 microscope. So, I just totally disagree what was 3 going on here. 4 Q. Okay. So, the failing is that he 5 doesn't have an opportunity to observe it through 6 your microscope in your view, right? 7 A. We have never done anything but have 8 it on full brightness. 9 Q. One of the things he did is he raised 10 the illumination and the image and now, for example, 11 and, again, these are the Gold Bond, we'll look at 12 some J&J, but now, the yellows are brighter in 13 parallel, right, and that's a typical color for talc 14 in parallel, that brighter yellow, right? 15 A. I would agree. 16 Q. Okay. And the other thing that he 17 talks about on the next page, page 7, is that just 18 by raising the illumination to what he thought was 19 an appropriate level, the dark blue particle that 20 you're reporting on became a light blue particle in 21 the illuminated image, correct? 22 A. That is correct. 23 Q. Okay. 24 A. You can do all kinds of stuff with 25 Photoshop.</p>
<p style="text-align: right;">Page 87</p> <p>1 turned down the brightness a little bit on this and 2 what we can see is that by reducing brightness on an 3 image like this, you can start to turn lighter blues 4 into darker blues and those would have, those two 5 colors would have different refractive indices, 6 right? 7 A. Yes. 8 Q. And you can also start yellows as it 9 gets darker turning into or even if they were bright 10 yellow, you can start seeing them turn into darker 11 orange, right, for example the center of the flower 12 on the bottom, right? 13 A. That's correct. 14 Q. And so, if we look at what Dr. Su was 15 saying about your imaging and its effect on color 16 and the effect on the analysis, we can go to page 6 17 or page 7 unless I have slides. Is that visible to 18 everyone? 19 So one of the things that Dr. Su was 20 pointing out is that in his view, you did not have 21 appropriate or normal illumination of your images, 22 right? 23 A. Well, that's -- you're right that's 24 what he stated. He's wrong. I don't understand how 25 he can make that decision in China when we're over</p>	<p style="text-align: right;">Page 89</p> <p>1 Q. Well, again, so you're not saying 2 that anything has been changed except for brightness 3 level here, right? 4 A. That's a lot. You're taking evidence 5 and you're molding it into what you want to see. 6 Q. Well, what he's pointing out is that 7 in his view, this is what in normal illumination, 8 what you should be seeing under the PLM, the 9 brighter images, right? 10 A. Well, you keep saying "right." 11 That's his opinion but you can't -- at least I 12 always thought you can't take evidence and change it 13 and say, gee, this is what it would have looked like 14 if they did this with absolutely no evidence 15 whatsoever that that's true. 16 Q. We're going to do the same thing with 17 some other images in a second, but before we get 18 there, let's show some evidence that it is true. 19 Okay. So, as we pointed out, you 20 started looking at Johnson & Johnson for chrysotile 21 in about, what, 2019 or late 2019 or early 2020? 22 A. Sometime in 2020. 23 Q. And your first report was the 24 Zimmerman report, which we've already marked and 25 looked at, right?</p>

<p style="text-align: right;">Page 110</p> <p>1 And, again, so, the key thing is what 2 does the analyst actually see here as opposed to 3 what does he report the color is. Okay? 4 And so if we just go to the plain 5 image, I guess let's make it an exhibit next. It's 6 already an exhibit. 7 Let's just go to the plain image 8 first, and it's PDF 3, it's something that's already 9 in evidence, which is the 2023/02/28 Valadez report. 10 What D number? 11 MR. HYNES: Eight. 12 MR. DUBIN: D-8, okay. 13 BY MR. DUBIN: 14 Q. Let's put just the image itself up 15 first. Is there a way we can Zoom on that a little 16 bit to make it easier to see? 17 Okay. And so, when I first asked you 18 about this without using a color bar or without 19 doing anything else, you told me that you were 20 observing in this particle a brownish gold, correct? 21 A. Correct. 22 Q. Okay. But then you give some data 23 here -- if we can scroll back up, we can see RIs. 24 You give some data at the bottom and there's an RI 25 number. You see it? You see RI 1564, right?</p>	<p style="text-align: right;">Page 112</p> <p>1 slide 51 you have admitted that for purposes of your 2 analysis calling this chrysotile, you have treated 3 this particle in your analysis as if it is the 4 circle color here, 1.564, right? 5 A. Yes. 6 Q. Okay. And I think we already -- you 7 already agreed with me about what color reference 8 chrysotile is on the wavelength, right, and that's a 9 color corresponding to magenta, correct? 10 A. I haven't agreed with you -- 11 Q. Do you agree -- 12 A. -- other than it's an 1866b standard. 13 You don't get magenta when you look at other -- what 14 people say are chrysotile, such as the SG-210 or the 15 RG144 at the smaller sizes, but for asbestos-added 16 products I totally agree. 17 Q. I'm just asking what color it is. 18 Let's do it more slowly then. Let's go back to 19 slide 15. 20 And ISO gives refractive index values 21 for these reference samples, right? 22 A. That's correct. 23 Q. And do you recall what the reference 24 number is in parallel? 25 A. I do not.</p>
<p style="text-align: right;">Page 111</p> <p>1 A. Correct. 2 Q. And what you're able to do when you 3 give us that piece of data is we can do an analysis 4 in reverse to figure out what color your analyst was 5 calling the particle. And so I just want to make 6 sure we understand how that works in reverse. So 7 let's start with slide 46. Actually, we can 8 probably go to 47. 9 Okay. And so, for example, if you 10 just give the RI which was 1564, we can consult 11 the Su tables for the appropriate oil, and if we go 12 to 4 -- I can't see -- if we go to 48, we've done 13 this before, we can see that the color you're 14 calling this is equivalent to the wavelength of 15 light of 560, and if we go to slide 50, we can see 16 that that color, the color that you are calling this 17 particle for purposes of your analysis calling it 18 chrysotile is this deeper purple, right? 19 A. It shows it on there but it's a 20 blend. So that's where that should be -- should be 21 in my opinion. There really is no purples I'm aware 22 of. But that's where it falls. And I stick with 23 it. 24 Q. And you stick with it because you've 25 already admitted that if we go to, for example,</p>	<p style="text-align: right;">Page 113</p> <p>1 Q. I mean, we can just -- we've already 2 marked ISO but do you recall it as 1.556. 3 Otherwise, we can look back at ISO. 4 A. Okay. 5 Q. What? 6 A. I said okay. 7 Q. So, this is slide 19, we'll just call 8 it up. It's already in. So they're reference 9 values. So, ISO tells you what color it thinks that 10 is, right? 11 A. Yes, for the 1866b. 12 Q. And so, it gives you this number 13 1.556, right, correct? 14 A. Correct. 15 Q. And if we look back at Longo slide 16 15, you can see that 1.556 corresponds to this 17 magenta, right? 18 A. Yes, sort of magenta, I agree. 19 Q. And so, just comparing the two 20 colors that you're calling this -- we can go to 21 slide 54 -- you are claiming that this particle that 22 you found in Johnson & Johnson that's on the left is 23 more purple than standard reference chrysotile, 24 right? 25 A. No, it's not more purple. It's just</p>

<p style="text-align: right;">Page 114</p> <p>1 a blend of those colors. And you have to be looking 2 under the microscope also to dial it in, but it's 3 not magenta and has no relationship to these 1866bs. 4 Q. And, remember when we were talking 5 before that one of the reasons why chrysotile has a 6 low birefringence value, for example, is that purple 7 is not that far from blue on the color chart, right; 8 that's why chrysotile has a low birefringence, 9 right? 10 A. It has a low birefringence because 11 that's the way the crystal is designed. 12 Q. But if I'm looking at a yellow 13 particle and I treat it as a purple particle, then 14 I'm creating low birefringence? 15 A. No, we're not creating anything. 16 Q. Well, there's no dispute, though, for 17 example, if we look at slide 55, that when you do 18 this calculation, when you eventually do the 19 birefringence calculation that you rely on, the 20 input in one of the two numbers that you're using 21 for that calculation for this particle will be based 22 on the refractive index that's associated with that 23 dark purple, right? 24 A. That brownish color, yes. 25 Q. Okay. And so whatever result you get</p>	<p style="text-align: right;">Page 116</p> <p>1 that we looked at, that has the purplish color in 2 it. 3 Q. Okay. And the next particle was 003. 4 And if we look at that on a color chart, that's 5 slide 57, so this is something you're calling 6 chrysotile in your Valadez report, right? 7 A. Correct. 8 Q. And you're treating this in your 9 analysis as if it is the circled color, 1.568, which 10 is magenta, right? 11 A. If you look around the outer edge, 12 that fibers there, that's what is being seen. 13 Q. Okay. But functionally you're 14 basically saying that all of these particles in 15 parallel match standard reference chrysotile? 16 A. No, I'm not saying that at all. 17 Q. You are treating them as the same 18 color or more purple? 19 A. We're treating them that what it 20 shows. Where if you're just taking the outer edge 21 or the one where it's being, you know, refracted 22 through the outer edge, then -- we started doing 23 this after Dr. Bo Li was in our lab doing our last 24 NVLAP and we were showing him this materials to look 25 at and he said we should use the very, very last,</p>
<p style="text-align: right;">Page 115</p> <p>1 in your birefringence calculation, it's going to be 2 based on calling that particle purple? 3 A. We're not calling it purple. It's 4 got a tint to it and you have to -- you have to know 5 that the way these colors work on these crystals, 6 you don't get exactly what those charts ever show. 7 It's a blend, so I stick with it. 8 Q. And so, let's do some of the other 9 particles. We can just do it more quickly. We can 10 go to Longo slide 56. 11 This is your second particle or CSM 12 002 and, again, before I showed it to you on a color 13 bar, you told me that it looked brownish gold, 14 right? 15 A. Now that I'm looking close, I see 16 some purple on the outer edge. 17 Q. But you also agree that the color 18 that you're treating this for, so your refractive 19 index you're giving us is 1.565 and if we back that 20 out, the color that your analyst is calling this is 21 somewhere between that 1.564 purple and the 1.566 22 magenta, right? 23 A. No, you have to -- it's hard to see 24 it here, especially, you know, when you're 25 reproducing it. But if you go to the outer edge</p>	<p style="text-align: right;">Page 117</p> <p>1 you know, the very edge, fiber bundle, fibers on 2 edge. But I'm not sitting at the microscope and 3 this has been copied a few times, so it's kind of 4 hard to debate you on it. 5 Q. Okay. So, slide 58, just so we can 6 get the last particle, this is another particle that 7 you're saying has a refractive index range of 1.565 8 to 1.568, so the circled range, again, treating this 9 particle for your analysis as if it's magenta, 10 right? 11 A. I wouldn't call it quite magenta, I'd 12 call it more purple. 13 Q. And, I know one of the things that 14 you've -- and you've mentioned it here, if we go 15 back to slide 51 for a second, one of the things 16 that you said and you tried to say is, well, sure, 17 looks yellow, but I see some coloration around the 18 edge and you said that again today, right? 19 A. Yes, sir. 20 Q. But, even if we look at just this one 21 image and we can look at a lot more if we need to, 22 there are things around this that are definitely 23 talc plates, right? You're not claiming that's all 24 chrysotile, these rounded structures, right? 25 A. No, of course not.</p>

<p style="text-align: right;">Page 118</p> <p>1 Q. And so, we see the same kind of red 2 edge effect because of your imaging on the talc 3 plates also, right? 4 A. We have to get it in the same 5 orientation but some do, some don't. 6 Q. And I asked you about that initially 7 before you started relying on the edge effects to 8 call fibers chrysotile, I asked you about these edge 9 effects and you told me that when you see them on 10 particles, you don't know whether they were just an 11 artifact or not, correct? 12 A. When was that? 13 Q. That was in your Eagles deposition. 14 A. Then that must be correct. 15 Q. Okay. And I asked you whether these 16 red edges were an artifact and you said maybe, and 17 you would have to check if your focus was off, 18 right? 19 A. Yes. 20 Q. And so if we go back to 51, for 21 example, I've already got it up, if you're claiming 22 to see some sort of edge effect here that you're 23 basing your purple color on but it's an artifact, 24 then your entire analysis is wrong? 25 A. No, this analysis is not wrong. This</p>	<p style="text-align: right;">Page 120</p> <p>1 THE WITNESS: Thank you. 2 THE COURT: Let's meet everyone back 3 here no later than five of one. We're off the 4 record. 5 (Luncheon recess: 11:54 a.m. to 6 12:58 p.m., Eastern Standard Time.) 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>
<p style="text-align: right;">Page 119</p> <p>1 is chrysotile and I would need to be looking at the 2 microscope here. I stand by this. It's not wrong. 3 And we'll get to that more tomorrow, I guess. 4 Q. Well, slide 55, as you pointed out, 5 that if this edge effect that you're basing calling 6 this color, this purple, if that's just an artifact 7 of the image and not what you need to be focusing on 8 for dispersion staining, then when you do this 9 calculation, you're putting the wrong number in 10 there, it should be the number corresponding to the 11 yellow? 12 A. That is not yellow and, you know, if 13 it's this, if it's that. You know, chrysotile, the 14 birefringence can get as high as 0.017. So, it is 15 not wrong. 16 Q. Okay. So, I'm going to move now to 17 talking about illumination in your Valadez work. 18 MR. DUBIN: Your Honor, I don't know 19 if you prefer me to stop now and pick up after lunch 20 or go on for a little bit, I'm happy either way. 21 THE COURT: Do you have any 22 preference, Dr. Longo? 23 THE WITNESS: Probably might be a 24 good time to break for lunch. 25 THE COURT: All right.</p>	<p style="text-align: right;">Page 121</p> <p>1 AFTERNOON SESSION 2 THE COURT: We're back on the record. 3 BY MR. DUBIN: 4 Q. So, just to back up two slides in 5 order to make sure we're staying in flow and 6 understand where we are, if we could back up to 7 slide 51, please. 8 So, we were talking about the 9 characterization of the colors, which is the first 10 step in the analysis that drives the RI values, 11 everything that's going to go into the calculation. 12 And we were talking about whether this particle that 13 we're seeing here on screen is or is not truly 14 purple, okay, and that's one of the things we were 15 just talking about a moment ago. 16 And then if we see again slide 55, we 17 know and we're going to talk a little bit about the 18 birefringence formula and how you reached the 19 conclusion that things are chrysotile, but, for 20 example, this first input in the birefringence 21 formula, if you say that this particle is purple, 22 then the value for purple goes into that first step, 23 right? 24 A. Well, I'm not calling it purple. I'm 25 just calling it the color that we find in that</p>

<p style="text-align: right;">Page 158</p> <p>1 A. No. I guess I'd go all the way back 2 to 2004 when we received five pounds of -- of 3 Vanderbilt's Nyltal and we did testing on that but 4 that was a whole different size range. Nyltal 1 or 5 Nyltal A, you had lots of bundles and stuff in there 6 that were a hundred microns, 50 microns. That's the 7 first time we started testing it. 8 And then we tested Visbestos with the 9 attorneys there and I think that was 2014, 2015. 10 Q. We'll look at the dates in a second. 11 Did MAS participate in the NVLAP 12 proficiency exam that involved testing laboratory's 13 ability to identify the mineral Calidria? 14 A. We looked high and low to see if we 15 could find that. We could not find that analysis. 16 Q. You can't find the analysis. Do you 17 know whether you participated? 18 A. I don't know. That's too long ago. 19 Q. Because that was in 2001, right? 20 A. Yes. 21 Q. Is that correct? 22 A. I think that's correct. Where 35 23 percent of the labs failed, something like that. 24 Q. So, I want to make sure we understand 25 when we use the term Calidria that we know what</p>	<p style="text-align: right;">Page 160</p> <p>1 Q. As I understand it, your theory is 2 that because laboratories out there don't understand 3 what Calidria looks like, that's why they're 4 supposedly missing chrysotile in all of these talc 5 products, right? 6 A. That's what I think. There's got to 7 be a reason that other people aren't finding it 8 except with TEM are the ones I know about. 9 Q. And so, your theory is that this 10 unique form of chrysotile that's found in this one 11 location in California is the type of chrysotile or 12 the appearance of chrysotile that is found in talc 13 from Vermont, from Italy, from Montana, from every 14 other mine, talc mine in the United States, that 15 somehow this unique type of chrysotile structure 16 that has only been found in this one mine in 17 California has somehow jumped into talc from every 18 area in the United States and from Italy, right? 19 A. Now you're being silly. I'm sorry. 20 No. It's not jumped in there. And 21 also, these materials have been milled. You can go 22 to the RG -- the SG-210 chrysotile without us doing 23 anything has an average length of 10 microns, the 24 RG-144 without us doing anything has any average 25 length of about 80 microns. So, this not formed</p>
<p style="text-align: right;">Page 159</p> <p>1 we're all talking about. So, slide 85. 2 So, Calidria is, actually, just -- is 3 a brand name for a particular type of chrysotile 4 asbestos, right? 5 A. Correct. It's like amosite. Amosite 6 is not a mineral. It's the asbestos mines of South 7 Africa. So, it's just a tradename. 8 Q. The name comes from California and 9 the New Idria serpentine deposit, right? 10 A. That's right, good for you. 11 Q. Been there, so... 12 And the chrysotile from that area is 13 typically considered to be a unique chrysotile 14 formation that occurs there and perhaps one mine in 15 Yugoslavia, right? 16 A. Correct. 17 Q. In fact, you said you've never seen, 18 I think -- the chrysotile from there is completely 19 different from chrysotile that you find in Canada, 20 Vermont, Arizona, places like that; it's a different 21 sort of morphology is what you said, right? 22 A. If you put Calidria in like a Ziploc 23 bag, it looks like flour. If you take chrysotile 24 from Canada or 30 other places, it's almost like 25 cotton candy.</p>	<p style="text-align: right;">Page 161</p> <p>1 that size. This is after it's been milled you get 2 to that size, at least -- and why is that size in 3 the chrysotile? Well, some may think that the 4 milling won't do that -- 5 Q. Okay. 6 A. -- for chrysotile 'cause, you know, 7 it has such high tensile strength, but we're not 8 talking about your average ball mill. These are big 9 monster machines that have a lot of force. I don't 10 have another explanation why they look so similar. 11 Q. Well, let's first just talk 12 about whether it does look similar, whether we 13 assume -- let's talk about what Calidria should 14 actually look like and whether it looks like what 15 you're claiming to find in Johnson & Johnson talcum 16 powder products. Okay? 17 And so, we're going to start out with 18 that by talking about an analysis that your lab did 19 of Calidria asbestos in a product called Visbestos, 20 which was essentially bagged of asbestos to be used 21 in the drilling mud industry, and it was Calidria, 22 right? 23 A. Correct. 24 MR. DUBIN: And so, let's mark that 25 next, Exhibit 13.</p>

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1 CERTIFICATE OF OFFICER

2

3 I CERTIFY that the foregoing is a true
4 and accurate transcript of the testimony and
5 proceedings as reported stenographically by me at
6 the time, place and on the date as hereinbefore set
7 forth.

8 I DO FURTHER CERTIFY that I am neither
9 a relative nor employee nor attorney or counsel of
10 any of the parties to this action, and that I am
11 neither a relative nor employee of such attorney or
12 counsel, and that I am not financially interested in
13 the action.

14



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16 ANDREA NOCKS, CCR, CRR

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